FIRST ANNUAL REPORT

Capacity Building for Quality Child Survival Interventions: The CEPAC/IEF Joint Program

USAID Contract/Agreement FAO-A-00-99-00039-00

1. What are the main accomplishments of the program? What has the project done well? What factors have contributed to these accomplishments?

A. CEPAC/IEF Relationship Strengthened

One of the achievements during the past year has been the establishment of a solid relationship between IEF and CEPAC. A strong relationship is crucial for the program's success. Both IEF and CEPAC must be willing and committed to working together and sharing information in order for the project's objectives to be achieved. Both organizations signed a Partnership Agreement (see Annex III of the Revised DIP) in which they agreed to maintain a spirit of partnership based on cordiality, participation, transparency, respect, and cooperation. The purpose of the partnership is for CEPAC and IEF to jointly:

a. Provide the management, technical support and other resources necessary to support the implementation of the project;
b. Participate fully in all key project cycle events including development of detailed implementation plan, baseline and other surveys, annual workplans, and annual reports;
c. Participate directly in the mid-term and final evaluations of the project; and
d. Provide outputs and reports as required by AID and IEF, in conjunction with the IEF to document its support activities.

Both organizations agreed to use joint interests and talents to focus on:

1. Enhancing organizational capacity building and effectiveness; and
2. Providing effective child survival and other community based health programming benefiting those in need.

The IEF Project Advisor, Kirk Leach, works at an office in CEPAC headquarters in Santa Cruz. This proximity strengthens the IEF/CEPAC relationship, facilitating a daily exchange of ideas and information. Mr. Leach also spends several days per month overseeing field activities in collaboration with the Co-Directors of health, Dr. Mabel Morales and Dr. Osvaldo Chavez. Dr. Mabel is based at the CEPAC clinic in Yapacaní, while Dr. Chavez is based at the CEPAC clinic in Buena Vista. Mr. Leach has developed a very good rapport with the field staff and thus has access to community-based activities and information.

IEF Headquarters staff visited CEPAC several times during the first year to establish a relationship with CEPAC staff as well as work on different project components. In

November of 1999, Lily Riva Clement, MPH, Project Technical Advisor, and Dr. Fernando Murillo, Country Representative, traveled to Bolivia to establish relations with CEPAC personnel, and draft the Partnership Agreement. During the trip, IEF and CEPAC developed a Partnership Agreement along with a one-year workplan and organogram for IEF/CEPAC interactions. In June of 2000, Ms. Clement, Dr. Fernando Murillo, and Jim Clement, MBA, visited CEPAC to conduct the cost analysis study, discuss options for expanding CEPAC's coverage from Yapacaní to the entire Ichilo Province, and identify CEPAC's strengths and weaknesses. Achieving the objectives of the trip strengthened the IEF/CEPAC relationship. Collecting and analyzing the data necessary for the cost analysis was done in a collaborative manner. In November of 2000, Ms. Clement, Dr. Murillo, and Gwen O'Donnell, MA, MPH, traveled to Santa Cruz to gather information for the DIP rewrite as well as have CEPAC develop an EPI/VA coverage proposal. IEF staff collaborated with CEPAC's Executive Director, Co-Directors of Health, Project Accountant, Project Administrator, and other staff, to achieve project objectives. The endeavor led to a strengthening of the CEPAC/IEF relationship.

B. CEPAC/MOH Relationship Strengthened

Strides have also been made during the first year in strengthening the relationship between CEPAC and the MOH. Substantial coordination between ministry officials and CEPAC field staff has taken place, especially in Yapacaní. Workshops and training sessions for health workers (RPSs) as well as district officials have taken place in the project's three municipalities (i.e. Yapacaní, Buena Vista and Santa Cruz). CEPAC's Executive Director, Widen Abastaflor, characterizes the relationship between CEPAC and the MOH as "good." There are inherent challenges to working with the MOH, however these challenges are not insurmountable, especially due to improved relations over the past year.

C. CEPAC/IEF/MOH Working Relationship

Another major accomplishment of the project during the past year has been the establishment of a working relationship between IEF, CEPAC, and the Bolivian Ministry of Health (MOH). The often-difficult task of integrating personnel from different organizations has proceeded smoothly due to the formation of the Ichilo Partners Group (IPG). The IPG consists of representatives from IEF, CEPAC, the MOH, and the Belgian Technical Cooperation, and meets on a monthly basis. The Belgians have been working with the MOH to improve the health system in Ichilo Province as well as in the neighboring province of Sara. The IPG monthly meetings have facilitated an efficient means to share information, resulting in improved coordination and planning between the four actors. An important outgrowth of these meetings has been an agreement by the Belgian Technical Cooperation to provide funding for the improvement of the cold chain, over and above the USAID funding already budgeted in the project.

The IPG has made a list of all the equipment and supplies needed to improve the cold chain (Refer to Annex XX of the Revised DIP). All partners are also in the process of agreeing to a workplan for cold chain maintenance and improvement. IEF/CEPAC have

agreed to repair the cold chain in Ichilo Province with the financial and technical assistance of the Belgian Technical Cooperation. Quotes have been obtained for equipment purchase, and a plan to install, maintain, and supervise the cold chain is being developed by CEPAC and the MOH, with assistance from Belgian Project and the IEF Project Advisor. Preliminary agreements with the MOH were reached in November 2000 during a half-day workshop entitled "Improving the Flow of Vaccinations to Ichilo Province", and a workshop has been scheduled for January 2001 to train the new Cold Chain Supervisor and the field health personnel in maintenance and emergency measures. This training is being incorporated into a larger MOH supervision-training workshop. The equipment will be bought just before the workshop so that installation may begin immediately afterwards.

Seven refrigerators for use with electricity and 8 for use with solar panels will be bought. Although the up-front cost for the solar systems is high, the problems that health personnel face obtaining gas make them necessary for a working cold chain. Cold Boxes for the Mobile Units will also be purchased. Total cost for all equipment will be approximately $15,000. This project will cover $6,000 of that cost, while the Belgian Cooperation will pay $9,000.

The IPG has also agreed to conduct a census in Ichilo Province. Preliminary work was completed on the census, but the initial information collected by RPSs was of low quality and was therefore not reliable. The census strategy must thus be re-evaluated. Each of these activities, cold chain improvement and the census undertaking, reflect a strengthening of relations between the members of the Ichilo Partners Group.

D. Completion of Knowledge, Practices, and Coverage Survey

A third major accomplishment during the first year was the completion of the Knowledge, Practices, and Coverage Survey (KPC) in February 2000 (see Annex XXI of the Revised DIP). Andean Rural Health Care (ARHC) and CEPAC performed the survey. The KPC team ensured all communities were investigated, even those remote communities that were initially inaccessible due to rain. The team implemented the survey in a systematic, thorough manner to ensure high quality results. The KPC report provides excellent baseline data on the age and sex of children, growth monitoring, immunizations, vitamin A, tetanus toxoid, breastfeeding/nutrition, diarheal diseases, acute respiratory infections, maternal health, quality of water and hygiene, access to health programs, child death rate, and the rate of miscarriage. The data from the KPC define what and where the major problem areas are, and have facilitated the definition of concrete indicators. Due to time constraints, consultants from ARHC were not able to extensively train CEPAC staff to perform the midterm KPC. In order to compensate for this, prior to the midterm, CEPAC will present a plan to ARHC on how they intend to conduct the KPC. ARHC will then critique the plan and help CEPAC design a quality instrument. In addition, a consultant from ARHC may be hired to be present on site during implementation of the midterm KPC.

E. Completion of Health Facilities Assessment

The second baseline survey successfully completed during the first year was the Health

Facilities Assessment (HFA). Dr. Luis Amendola, a consultant with extensive experience in baseline surveys, CEPAC staff, and Kirk Leach, IEF Project Advisor, carried out the survey during March and June of 2000. Due to the fact that Mr. Leach and Dr. Amendola were working on the DIP, only 16 of the 24 health facilities were analyzed in March. The remaining 8 health facilities were investigated in June. Both parts of the survey were carefully and thoroughly conducted to ensure quality results. The HFA report produced at the completion of the assessment provides quality data about all 24 health facilities in Ichilo Province. The results have illustrated that more emphasis must be placed on supervisory, equipment, and supply issues, rather than health worker knowledge.

F. *Improving the Cold Chain*

A fifth achievement during the past year was the agreement reached regarding the necessity of improving the cold chain, as well as the agreement between CEPAC and the Belgians to fund the changes. The MOH has committed to providing a staff person to become the Vaccines/Cold Chain Coordinator for the Province. The fact that the cold chain and adequate vaccine supplies have been recognized as important, and that steps have been taken to institutionalize this concern, is promising. For the first time a specific person will be responsible for making sure that the cold chain is functioning, and that every health facility has adequate vaccine supplies. This is crucial for reaching a goal of 85% complete vaccination coverage.

Cold chain data from the HFA demonstrate that nine communities have a functioning refrigerator with a temperature control knob. Of seven additional communities with electricity, five do not have a functioning refrigerator, and two have refrigerators without temperature control knobs. In the remaining eight communities, four have refrigerators that run on gas, and four have no functioning refrigerator of any kind. Due to insufficient funds, or a lack of access or supply of gas, the refrigerators do not work nor do they have temperature control knobs. Thus, Ichilo Province needs a total of 15 refrigerators, seven that function on electricity and eight that function on solar energy. CEPAC decided it would be better to replace the gas refrigerators with refrigerators that run on solar panels. They arrived at this decision due to the fact that gas trucks do not come often, if at all, to these communities, nor are funds consistently available to purchase gas. CEPAC also recognized the usefulness of ensuring that the municipalities sign an agreement to replace batteries in the solar refrigerators when necessary.

The HFA data also demonstrated the need for three vaccine storage cold boxes for the mobile teams. Up until now, the mobile teams have been using a thermos to transport vaccines. The inside of the thermos is divided into four sections according to vaccine type, and each section has an ice pack. The ice packs only last for eight hours, however, and thus using a thermos decreases vaccine effectiveness by 50 percent. The cold boxes do not rely on ice packs and will therefore maintain vaccines for much longer, significantly improving the quality and effectiveness of vaccines.

CEPAC staff, the IEF Project Advisor, and the Belgian Technical Representative completed a plan for the purchase and installation of cold chain equipment during the first year of the project. Price quotes have been obtained for equipment to correspond

with the purchase plan. Although the plans were completed, the purchase and installation of equipment stalled due to the civil unrest that occurred in September and October of 2000 in the project area (see question 2). CEPAC plans to have the refrigerators installed

within the first trimester of the second year. CEPAC and the MOH will also develop a maintenance and supervision plan within the first trimester of the second year. This plan will include training for the MOH's district Vaccines/Cold Chain Coordinator.

F. Design of the Rapid Rural Appraisal (RRA)

Another accomplishment during the first year was the design of the Rapid Rural Appraisal (RRA) by CEPAC and the IEF Project Advisor. Dr. Osvaldo Chavez and Dr. Mabel Morales worked with Kirk Leach to develop a survey for Ichilo Province. The objectives of the RRA were to provide IEF and CEPAC with:

- census information for the nutrition component of this project;
- mapping information for water/sanitation proposals development and general use by area health personnel; and
- an opportunity to disseminate the results of the KPC.

The census is particularly important in this project because there are issues concerning an underestimation of the population by the MOH. Producing definitive community maps for all health personnel is also a priority. The maps will help to assess community water systems for the development of a district-wide water/sanitation proposal that would address one of the main causes of childhood illness in the area, namely unsanitary water. The census also provides an opportunity to disseminate the results of the February 2000 KPC. The census and the dissemination of KPC were supposed to be carried out in September and October 2000. Civil strife resulting in blockades of the highway leading to the project area prevented this from happening, however. The blockades were recently lifted, and activities will thus resume in November.

A first phase of this work has nearly been completed. The MOH has already solicited simple censuses from the RPSs (*Responsables Para Salud*, or Community Health Workers). The Buena Vista RPSs have concluded theirs, and Yapacaní and San Carlos are nearing completion. The results of this preliminary work will simply be the names, ages, and occupations of all individuals in a given community. Randomly selected censuses will be checked for accuracy by CEPAC staff.

Implementation of the RRA was delayed due to the civil strife that occurred in September and October. Protestors blocked access to the project area preventing implementation of the assessment. (Please refer to question 2 for more detail concerning the civil strife.) CEPAC plans to implement the RRA in the first trimester of the second year.

G. Completion of the Cost Analysis

A final achievement during the first year was completion of the cost analysis in July by James Clement, MBA. (See Annex XXI of the Revised DIP.) The purpose of the study

was to assist CEPAC in understanding health service delivery costs in Yapacaní in order to efficiently expand services in Ichilo Province. CEPAC currently delivers services through three channels: clinics, mobile teams and health festivals. The cost analysis systematically explored each of these channels. Additionally the study examined CEPAC's data collecting and reporting practices. It also evaluated the strategies employed to deliver health services with a retrospective and a prospective component. Mr. Clement designed the survey to be 'user friendly' and also informally trained certain CEPAC staff in order that they be able to repeat a similar analysis in the future.

Key findings from the cost analysis were the following. First, a reduction in visits by the mobile team to each community would allow the same resources to serve more than three times the number of people. This in addition to a reduction in the size of the mobile health team would reduce the per unit cost of providing care by 85%, while greatly improving the health of the overall population. Second, for their cost-effectiveness to match that of the mobile team, 78 individuals must receive care at a health festival. Thus, if the number of people treated at a festival meets or exceeds 78 individuals, shifting resources from the mobile teams to the festivals should be considered. Third, clinic cost recovery mechanisms should be explored to improve clinic efficiency and sustainability. And fourth, data collection and reporting systems of CEPAC should be updated and standardized for optimal, efficient use.

The results from the cost analysis initiated a shift in the thought process of CEPAC staff. For example, CEPAC has taken steps to double the number of communities visited by the mobile health units. This will lead to a more efficient use of resources and improved coverage rates. CEPAC has also begun to consider ways to change the composition of mobile team staff while maintaining a high level of service quality. Similarly, they are considering implementing potential cost recovery mechanisms, and improving their data collection and reporting systems. For quite some time, CEPAC has wanted to be more "public health oriented," but they have not had guidance on how to shift from being clinically-oriented to preventive-oriented. A major accomplishment, however, was the decision to double the population they serve. Two months of careful, well-thought out planning resulted in a proposal to double the number of EPI/VA beneficiaries, raising coverage to 85 percent. The plan will be implemented before the end of the second year.

Despite significant delays due to the circumstances described in Question 2, the project has produced solid results in the activities achieved thus far. During the second year of the project, implemented activities will continue to produce quality results in a timely fashion.

2. **What factors have impeded progress towards achievements of the overall goals of the program and what actions are being taken by the project to overcome these restraints?**

A. Personnel Issues

Several factors impeded progress toward the overall goals of the program. First, IEF personnel issues proved to be a serious impediment. A Project Advisor with sufficient

qualifications to supervise the project in Bolivia was not found until the end of February of 2000. Kirk Leach accepted the position and immediately traveled to Bolivia to write the DIP in a month with the help of a consultant, Dr. Luis Amendola. The lack of time resulted in an "incomplete" DIP, as described during the June 2000 DIP Review. As a result, although many activities were implemented in the first year, much of the second half of the first year has been spent gathering information for the DIP rewrite.

The Child Survival Coordinator position at the IEF HQ level also was not staffed from February to October of 2000, due to the lack of a qualified candidate. The absence of a Child Survival Coordinator with technical expertise proved to be a major impediment in the progress of the project. The role of the CS Coordinator is to provide routine coordination and communication between IEF headquarters, IEF field staff, CS experts, and USAID. The role is also to ensure that the project follows state of the art protocols for each intervention. In short, the CS Coordinator position is vital for the support of CEPAC and IEF field personnel. We are confident that the person hired for this position, Ms. Gwen O'Donnell, will be instrumental in the group effort to get the project back on schedule.

A final personnel issue was the absence of the Program Assistant for the IEF Project Advisor in Bolivia, due to higher than expected initial project costs. As the Child Survival Project is the first IEF project in Bolivia, the lack of a Program Assistant proved detrimental. Mr. Leach, the Project Advisor, lost valuable time performing many administrative tasks while he worked to set up project infrastructure upon arriving in Bolivia. A Program Assistant will be hired in January 2001 to assist the Project Advisor with administrative and program-related duties in Bolivia. The ideal candidate will be a Bolivian junior health professional who will be trained during the second and third years to inherit the Project Advisor's position in the fourth year of the project. This person will maintain the position in the event of a project extension.

B. Civil Strife in Bolivia

A second major issue affecting project progress at a crucial time was the civil strife that took place in Bolivia in September and October of 2000. Excerpts from the United States Department of State travel warning for Bolivia (issued 10/23/00) describe the situation:

"Violence and civil unrest, primarily associated with anti-narcotics activities in the Chapare region between Santa Cruz and Cochabamba, and the Yungas region northeast of La Paz, periodically create a potential risk for travelers to those regions. Violent confrontations between area residents and government authorities over coca eradication occasionally result in the use of tear gas and stronger force by government authorities to quell disturbances. U.S. citizen visitors to the Chapare or Yungas regions are encouraged to check with the Consular Section of the U.S. Embassy prior to travel."

"In April and again in September 2000, civil unrest became more generalized, spreading to regions throughout the country, both in urban and rural areas. Protestors blocked roads with stones, trees, and other objects, and reacted violently when travelers attempted to pass through or go around roadblocks. U.S. citizens should avoid roadblocks and

demonstrations at all times. U.S. citizens considering a visit to Bolivia should keep apprised of current conditions and monitor local news sources before considering overland travel within the country."

The protests prevented CEPAC staff and the IEF Project Advisor from accessing the project site. As a result, several project activities were delayed including, installation of the cold chain, completion of the census, and implementation of the Rapid Rural Appraisal. It should be noted that protesting "campesinos" (rural farmers) removed the roadblocks only after the Bolivian Government promised that various concessions would be fulfilled by the end of December. The U.S. Consulate and the Bolivian populace are concerned that these promises will not be kept.

Despite these impediments, IEF and CEPAC fully expect to complete all scheduled activities. Significant progress towards attaining the project's proposed indicators will be achieved by the time of the mid-term evaluation.

3. In what areas of the project is technical assistance required?

We have identified several areas where technical assistance is needed.

A. Effectiveness of ORS Packets

Technical assistance is also requested with regard to the effectiveness of ORS. Concerns have been raised about the problems associated with giving mothers ORS packets to treat diarrhea. Mothers who are given ORS packets for free often become dependent on the packets, believing that they have "secret" ingredients that will cure their child. As a result, they overlook and forget the fact that fluids at home can be used just as readily to treat diarrhea. Technical assistance will thus be sought with regard to managing ORS usage.

B. Parasites and Diarrhea

A second issue related to diarrhea is a disagreement about the frequency that parasites cause diarrhea. CEPAC field staff argue that parasites cause the majority of diarrhea cases and that mebendazole is ineffective in treating children with multiple parasites. IEF technical staff do not agree with this argument. While it is true that the majority of children under 5 years of age in Ichilo Province have parasites and/or worms, the presence of parasites does not cause the majority of diarrhea. Health workers should give children mebendazol as well as pursue an aggressive deworming strategy, especially when anemia and malnutrition are also an issue. To mediate the dispute, technical assistance will be sought. Experts in diarrhea case management from the Johns Hopkins University School of Hygiene and Public Health will be contacted to address these issues.

C. Nutritional Assessment

The project has been and will continue working with the Johns Hopkins Division of Human Nutrition to design the nutritional component of the project. The purpose of the nutritional assessment is to obtain data on the type, origin, and quality of foods consumed, as well as cultural beliefs about supplementation and feeding children. The

assessment will also evaluate which intervention (Hearth model, etc.) would be most effective in the project area. Dr. Kerry Schulze (JHU Division of Human Nutrition) will help structure the instrument to be used in the assessment, as well as the nutritional intervention itself. Dr. Joel Gittelsohn (JHU Division of Human Nutrition) will also be contacted for recommendations during the development of the Nutrition and Health

Behaviors Survey, as will Dr. Peter Winch or one of his colleagues (JHU Department of International Health). The QHP survey will provide in-depth qualitative information about caretaker responses to malnutrition, feeding practices, and illness.

D. Breastfeeding Support Groups

A fourth area identified in need of technical assistance has to do with organizing breastfeeding support groups. Ichilo Province is host to numerous breastfeeding support groups. Exploring ways to link groups together in order to facilitate an exchange of information and experiences would be beneficial to mothers, infants, and project coordinators alike. The Project Advisor will talk to other NGOs in Bolivia to find out how they organize breastfeeding groups. At the same time, the Child Survival Coordinator will contact Linkages, CSTS, and other organizations for information.

E. Behavior Change Communication

Behavior Change Communication is the final area where the project seeks technical assistance. Reviewing and updating BCC radio messages, as well as other means of mass communication, is necessary. In an effort to strengthen breastfeeding messages, Linkages and La Leche League will be contacted. For technical assistance with nutrition messages, Anne Henderson at Facts for Life will be contacted, in addition to a representative from the Fanta Project. Phyllis Piotrow, Ph.D., at the Johns Hopkins Center for Communication Programs will also contacted. Dr. Piotrow has worked for many years in Bolivia and has established a strong network there. Other person(s) from the JHU Center for Communication Programs also working in Bolivia will be identified in order to request access to their information clearinghouse, educational materials, and pop line base data on health communication.

In regard to BCC, CEPAC has also specifically requested training workshops. Specifically, CEPAC would like to have training workshops on communication strategies in order that they be able to develop innovative materials for communities in Ichilo Province. In addition, CEPAC would like to train one individual to be a technical specialist in the design and application of BCC monitoring systems. Ideally CEPAC would like to develop a monitoring and evaluation system to measure the impact of mass media campaigns and activities related to the training of BCC facilitators. CSTS, Porter Novelli, and other organizations will be contacted to explore these questions. IEF and CEPAC will also discuss the possibility of hiring a local consultant to conduct a training workshop, or, alternatively, requiring the designated specialist to attend a course on BCC monitoring and evaluation.